

Abstract

A method for detecting failures in microactuator motors in head suspensions including exciting the head suspension at its natural resonant frequency, monitoring and evaluating the voltage produced by one or both piezoelectric elements in the motor, and comparing the voltage produced with one or more voltage waveforms corresponding to a properly functioning and mounted motor in response to a similar input. The method also includes applying a sweep frequency signal to provide visibility of a microcrack in the motor that may initially be concealed by plating on the motor.

M2:20560725.01